

IN THE CLAIMS

Please amend the claims to read as indicated herein.

1. (currently amended) A method of directional radio communication between a first station and a second station, the method comprising the steps of:

determining at the first station ~~a set of one or more~~ plurality of beam directions which are feasible for use in transmitting a signal from said first station to said second station using a signal received from said second station;

selecting at said first station ~~at least one of said beam directions,~~ from the plurality of beam directions, a direction for transmission of a signal from said first station to said second station, wherein the selection of the ~~at least one~~ direction for transmission is such that successive signals or groups of signals are transmitted in substantially different directions and such that on average each ~~beam direction available to said first station~~ of said plurality of beam directions is used a substantially equal number of times.

2. (currently amended) A method as in claim 1, wherein the ~~direction of transmission from said first station to said second station~~ for transmission is selected randomly from ~~said set of feasible~~ plurality of beam directions in a first random selection step.

3. (currently amended) A method as in claim 2, wherein a second selection is made from ~~the set of feasible~~ plurality of beam directions if the first selection step selects a direction used in at least one preceding signal transmission.

4. (currently amended) A method as in claim 3, wherein a further random selection is made from ~~the feasible~~ plurality of beam directions if the second random selection also indicates a direction used in at least one preceding signal transmission.

5. (currently amended) A method as in claim 3, wherein the ~~direction-selected~~ for transmission is used whether or not it is the same as a direction used in the at least one preceding signal transmission.

6. (currently amended) A method as in claim 1, wherein the ~~at least one~~ direction for transmission is selected from the ~~set of feasible~~ plurality of beam directions according to predetermined rules.

7. (currently amended) A method according to claim 6, wherein the ~~at least one~~ direction for transmission is selected by selecting the next feasible direction to that used in the preceding transmission.

8. (currently amended) A method as in claim 7, wherein the selection process for successive transmissions steps through the ~~set of feasible~~ plurality of beam directions in a first direction.

9. (currently amended) A method as in claim 8, wherein the selection process for successive transmissions steps through the ~~set of feasible~~ plurality of beam directions in a second direction opposite to the first direction when a predetermined boundary is reached.

10. (original) A method as in claim 6, wherein signals are transmitted such that the directions selected alternate respectively from one side of the preceding direction to the other side, at least a predefined angular spacing from said first direction being maintained in each instance.

11. (original) A method as in claim 6, wherein a reference direction is defined and subsequent signals are transmitted such that the directions selected alternate respectively from one side of the reference direction to the other side, at least a predefined angular spacing from said reference direction being maintained in each instance.

12. (currently amended) A method as in claim 1, wherein the ~~at least one~~ direction for transmission is selected for a given signal burst in a code division multiple access system.

13. (currently amended) A method as in claim 1, wherein the ~~at least one~~ direction for transmission is selected for a given time slot in a time division multiple access system.

14. (currently amended) A method as in claim 1, wherein the ~~at least one~~ direction for transmission is varied within a signal burst such that the ~~at least one~~ direction for transmission is selected for a component part of a signal packet or a time slot.

15. (currently amended) A method as in claim 1, wherein ~~one beam direction~~ of said plurality of beam directions is selected for the transmission of a signal from said first station to said second station.

16. (currently amended) A method as in claim 1, wherein more than one of said plurality of beam directions ~~are~~ is selected for the transmission of a signal from the first station to the second station.

17. (original) A method according to claim 16, wherein two beam directions are selected for the transmission of a signal from said first station to said second station.

18. (currently amended) A method according to claim 1, wherein at least one ~~direction~~ of said plurality of beam directions is selected for successive groups of signals and each group of signals comprises a predetermined number of time slots.

19. (currently amended) A method according to claim 1, wherein at least one ~~direction~~ of said plurality of beam directions is selected for successive groups of signals and each group of signals comprises a predetermined number of signal packets.

20. (currently amended) A method according to claim 1, wherein at least one ~~direction~~ of said plurality of directions is selected for successive groups of signals and each group of signals comprises a predetermined number of component parts of a signal packet or a time slot.

21. (previously presented) A method according to claim 1, when used in a network comprising a plurality of network elements comprising at least a plurality of said first and second stations, said selection step additionally taking into account at least one network criteria and/or at least one network element criteria.

22. (original) A method as in claim 21, wherein the selection step takes into account interference density in one or more directions.

23. (original) A method according to claim 21, wherein the selection step takes into account power loading conditions of components within said first station.

24. (original) A method as in claim 23, wherein the selection step takes into account instantaneous power loading conditions of components within the first station.

25. (original) A method as in claim 23, wherein the selection step takes into account average power loading conditions of components within the first station.

26. (original) A method as in claim 23, wherein the selection step takes into account the bit-rates of multiple users connected to said first station.

27. (currently amended) A method according to claim 1, wherein the selection step takes into account ~~the traffic conditions in~~ the or each direction for the plurality of beam directions.

28. (currently amended) A method according to claim 1, wherein the selection step takes into account ~~the statistical loading of the or each direction~~ plurality of beam directions.

29. (currently amended) A method according to claim 1, wherein the selection step comprises allocating one or more of said plurality of beam directions a priority rating based on additional criteria taken into account, said selection step favouring directions with highest priority.

30. (original) A method as in claim 29, wherein directions which have a low statistical use are allocated a greater priority than directions which have a relatively high statistical use.

31. (previously presented) A method as in claim 1, wherein said second station at least influences the selection made by the first station.

32. (previously presented) A method as in claim 1, wherein said first station is a base station.

33. (previously presented) A method as in claim 1, wherein said second station is a mobile station.

34. (currently amended) Apparatus for directional radio communication between a first station and a second station, the apparatus comprising:

a circuit that determines ~~a set of one or more~~ plurality of beam directions which are feasible for use in transmitting a signal from said first station to said second station using a signal received from said second station; and

a circuit that selects at said first station ~~at least one of said beam directions~~, from the plurality of beam directions, a direction for transmission of a signal from said first station to said second station, wherein the selection of the ~~at least one~~ direction for transmission is controlled such that successive signals or groups of signals are transmitted in substantially different directions and such that on average each ~~beam direction available to said first station~~ of said plurality of directions is used a substantially equal number of times.